



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-----------------------|---------------------|------------------|
| 09/138,807  | 08/21/1998  | RAMANATHAN RAMANATHAN | INTL-0083-US        | 4545             |
| 21906   | 7590        | 02/08/2005            | EXAMINER            |                  |
| TROP PRUNER & HU, PC<br>8554 KATY FREEWAY<br>SUITE 100<br>HOUSTON, TX 77024 |             |                       | SALCE, JASON P      |                  |
|   |             | ART UNIT              |                     | PAPER NUMBER     |
|   |             | 2611                  |                     |                  |

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                        |
|------------------------------|------------------------|------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>    |
|                              | 09/138,807             | RAMANATHAN, RAMANATHAN |
|                              | <b>Examiner</b>        | <b>Art Unit</b>        |
|                              | Jason P Salce          | 2611                   |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 09 August 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 12-18,20-23 and 25-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 12-18,20-23 and 25-43 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### ***Claim Objections***

1. Claims 14-15 are objected to because of the following informalities: The limitation "video transmission" is not supported in the preceding dependent and independent claims. Appropriate correction is required.

### ***Response to Arguments***

2. Applicant's arguments filed 8/9/2004 have been fully considered but they are not persuasive.

In regards to independent claim 12, Applicant argues that Kapoor teaches that the congestion controller at one location, such as satellite 20, sets a bit. Applicant also argues that the counter is not incremented until it is received at another location. These arguments do correspond to the broad limitation recited in claim 12, stating, "a counter that tracks the transmission from the point where the first marker was inserted". If the marker is inserted at satellite 20, and then counted at satellite 21, then the counter is incremented according to the marker (bit) set in satellite 20, therefore the counter tracks the transmission from the point where the first marker was inserted.

Applicant also argues Mao and Kapoor cannot be combined because Kapoor teaches a PSTN and Mao discloses a digital TV network and Mao does not necessarily view speed and bandwidth as problems due to the pending availability fiber-coax infrastructure and digital television. Kapoor teaches a satellite distribution system (see Column 1, Lines 50-67, while Mao also teaches the use of a satellite distribution system

(see Column 2, Lines 48-53). Therefore, the combination of Kapoor and Mao, with respect to their many possible methods of packet distribution, would have been obvious to combine at the time the invention was made.

In regards to claim 16, Applicant had attempted to add a previously allowed dependent claim 19. Applicant has eliminated limitations in claim 16, such as, "point in time when", "is transmitted", and "report the transmission", thereby making claim 16 broader, changing the scope of the claim. Therefore, since dependent claim 19 was not properly combined into independent claim 16 and claim 12 stands rejected, this Office Action is made Final.

After further consideration of the claim, the limitation of "call a method which provides a handle to said first marker" is inherently provided by Kenner, by the use of the analogous ping program, presented in Kenner at Column 27, Lines 54-61. The examiner has provided many examples of how a ping program is executed. For example, the book "Computer Networks and Internets", Second Edition, on pages 11-13 describe the ping program. Note that in regards to the claim limitations, calling a method (program code), corresponds to typing in the "ping" command (which runs the program code) along with the location the user wishes to ping (in the case of Kenner, a video server, which provides video transmissions), while providing a handle is the location of memory that stores the result of the ping command and the first marker is the data written in the test packet that is tracked.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16-18, 20-23, 25-26, 28-34 and 36-42 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kenner et al. (U.S. Patent No. 5,956,716).

Referring to claim 16, Kenner discloses setting a first marker in the video transmission (see a test packet at Column 27, Lines 58-59 and note that it is inherent that all packets contain different fields (markers), and therefore the system must know the difference between a test packet and a regular video data packet, and therefore is marked as such). Therefore, Kenner sets a marker in the packet to identify the packet as a test packet.

Kenner also discloses the limitation of "call a method which provides a handle to said first marker", which is inherently provided by Kenner, by the use of the analogous ping program, presented in Kenner at Column 27, Lines 54-61. The examiner has provided many examples of how a ping program is executed. For example, the book "Computer Networks and Internets", Second Edition, on pages 11-13 describe the ping program. Note that in regards to the claim limitations, calling a method, corresponds to typing in the "ping" command along with the location the user wishes to ping (in the case of Kenner, a video server, which provides video transmissions), while providing a

Art Unit: 2611

handle is the location of memory that stores the result of the ping command and the first marker is the data written in the test packet that is tracked.

Kenner also discloses tracking the transmission after the first marker (see Column 27, Lines 44-46 for a discussion of tracking the demand of video clips from remote clients, and Column 27, Lines 58-59 for performing this tracking by sending a test packet (which contains a marker as discussed above)).

Kenner also discloses that the tracking is on-going from the transmission of the first marker (also see Column 27, Lines 58-59 to teach that the test packet is used to calculate a round-trip elapsed time, therefore, the test packet is used to determine a response time to and from the destination being “pinged”, and is therefore on-going from the transmission of the first marker (data identifying the test packet)).

Claim 17 corresponds to claim 16, with the additional limitation of receiving web content transmission and accompanying television broadcasts from a content provider. Column 2, Lines 43-67 of Kenner teaches acquiring web content and also video on demand programs off the Internet. The content provider is disclosed as an ISP at Column 1, Lines 58-61). Therefore, it is inherent that web content as disclosed by Kenner can be accompanied by television broadcasts.

Claim 18 corresponds to claim 17, and additionally discloses receiving web content from a content provider (disclosed by Kenner at Column 1, Lines 58-65), combining the web broadcast content with the television programming (see rejection of claim 2) at a broadcast encoder (PIM 64 in Figure 4) and inserting the first marker at the broadcast encoder (see Column 27, Lines 44-46).

Claim 20 corresponds to claim 16, where Kenner discloses including instructions that cause a computer to call a method which obtains current transmission details using said handle (again note Column 27, Lines 54-61 for calling the ping program and receiving transmission details). The examiner notes that the ping program has instructions that call a method (program code) to obtain current transmission details (see arguments above).

Claim 21 corresponds to claim 20, where Kenner discloses the use of the ping program, which causes a computer to provide a second marker and associate said second marker with a second handle (see Column 27, Lines 54-56 for determining the response time of SRUs 92, therefore since plural SRUs can be tested, multiple ping queries can be initiated).

Claim 22 corresponds to claim 21, where Kenner discloses instructions that cause a computer to call a method, which provides transmission details (see the rejection of claim 20) and terminates the handle (note that when a ping program has reported the results of the test packet being tracked, the program terminates).

Claim 23 corresponds to claim 21, where Kenner discloses instructions that cause a computer to allow said first and second markers to be accessed separately using separate handles so that transmission details associated with different portions of a data transmission can be obtained (see the rejection of claim 21, where multiple ping commands can be initiated, therefore creating separate handles used to provide separate sets of transmission details for different SRUs (see Column 27, Lines 54-61)).

Claim 25 corresponds to claim 16, where Kenner discloses that this transmission (sending a test packet and calculating a response time (elapsed time) is reported to the PIM 64 (see Column 26, Lines 34-39 for a discussion of how the PIM 64 determines which SRU (local or remote) is used to obtain the desired video clip, and Column 27, Lines 50-57 for a teaching of determining the closest remote SRU 92 by the test packet technique discussed above). Also note that the ping program sends response times back to the person calling the ping method (see pages 11-13 of "Computer Networks and Internets", Second Edition).

Referring to claim 26, see the rejection of claim 16. Note that the limitation "video transmission" is broad and does not convey whether a video, audio or data packet is being marked. A video transmission could be any type of data distributed throughout a video network. Therefore, since Kenner discloses distributing various types of data (video, audio, test packets) throughout a video network (see Figures 1-4), the data is therefore a video transmission.

Referring to claim 28, see the rejection of claim 17.

Referring to claims 29-30, see the rejection of claim 18.

Referring to claims 31-34, see the rejection of claims 20-23, respectively.

Referring to claim 36, see the rejection of claims 16 and 25-26.

Referring to claims 37-40, see the rejection of claims 20-23, respectively.

Referring to claims 41-42, see the rejection of claim 18.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al. (U.S. Patent No. 6,459,427) in view of Kapoor (U.S. Patent No. 5,751,969).

Referring to claim 12, Mao discloses an encoder that combines different transmissions (see Column 5, Lines 40-42 for a discussion of the MOREGATE™ server 80, which is capable of combining program synchronous web content onto an MPEG video stream). Mao also discloses re-assigning PID (packet ID) values (setting a marker) by the re-multiplexer 70 (see Column 5, Lines 18-24).

Mao fails to teach a counter for tracking the transmission from the point where the first marker was inserted. Kapoor teaches both setting a first marker (Column 4, Lines 52-55) as well as teach the missing limitation of a counter for tracking a transmission from the point where the first marker was inserted (Column 5, Lines 15-19 for tracking the first transmission after a first marker was set and Column 5, Lines 48-49 for incrementing a counter when a marker is detected in a packet).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the MOREGATE™ server 80, as taught by Mao, using the congestion controller 26, as taught by Kapoor, for the purpose of managing the

network traffic through nodes (MOREGATE™ server 80 and set-top box 150) to avoid traffic congestion (Column 1, Lines 53-54).

Claim 13 corresponds to claim 12, with the additional limitation of a broadcast encoder coupled to a content provider. Mao discloses an HFC Headend 10 and an MPEG-2 remultiplexer 70 coupled to the HFC Headend 10 in Figure 1.

Claim 14 corresponds to claim 13, with the additional limitation of the broadcast encoder setting the first marker in the video transmission (see Column 5, Lines 18-24 for re-assigning a PID (first marker) in an MPEG stream).

Claim 15 corresponds to claim 13, with the additional limitation of the content provider setting a first marker in the video transmission (note that the HFC Headend 10 is equated to the content provider, which contains the remultiplexer 70 (broadcast encoder) coupled to the HFC Headend 10, therefore the content provider also sets the first marker).

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. (U.S. Patent No. 5,956,716) in view of Kapoor (U.S. Patent No. 5,751,969).

Referring to claim 27, Kenner discloses all of the limitations of claim 26, but fails to disclose providing an on-going count of bits transmitted. Kapoor teaches setting a first marker in a video transmission (see Column 4, Lines 52-55). Kapoor also discloses tracking the transmission after the first marker (Column 5, Lines 15-19). Kapoor also discloses reporting the transmission (Column 6, Lines 53-59). Kapoor continues to

disclose the limitation that is unsupported by Kenner of providing an on-going count of bits (see counting the marker set in a data packet at Column 5, Lines 48-49).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the PIM 64 used to acquire a video clip from a number of different remote SRUs, as taught by Kenner, using the congestion controller, as taught by Kapoor, for the purpose of managing the network traffic through nodes (PIMs and SRUs) to avoid traffic congestion (Column 1, Lines 53-54).

6. Claims 35 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. (U.S. Patent No. 5,956,716) in view of Hullinger et al. (U.S. Patent No. 6,295,092).

Referring to claim 35, Kenner teaches all of the limitations in claim 11, but fails to teach a login server for allowing a third party to access transmission reporting. Kenner fails to teach a login server, reporting a transmission to said login server and allowing a third party to access said login server to receive transmission reporting. Hullinger discloses such a server in a system that provides a report of transmissions made by the system (see Figure 1 for a user interface machine 24 for reviewing transmission data processed by other components in the system (Figure 1), also note Column 11, Lines 6-45 for the details of such charts and graphs made available to the user). Also note that that the user interface machine contains a Windows operating system, which inherently allows a user (Administrator, the computer owner, or any third party) to log in and out of the machine. The examiner has provided a section of the Microsoft Windows Operating

System book (see pages 16-17 and 77-81 in Chapter 2 for providing this feature, as well as tracking network activity for future reporting to a user).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the transmission tracking system, as taught by Kenner, using the log-in server, as taught by Hullinger, for the purpose of enabling a cable broadcast system to monitor network activity at off-peak hours (which is used to determine the most effective programming to broadcast at that hour).

Referring to claim 43, see the rejection of claim 35.

### ***Conclusion***

**7. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**8.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-

1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 20, 2005



CHRIS GRANT  
PRIMARY EXAMINER